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A.D. 1810 . . . . . N° 3398.

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S P E C I F I C A T I O N

OF

THOMAS MANN.

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ARTIFICIAL LEGS.

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L O N D O N :

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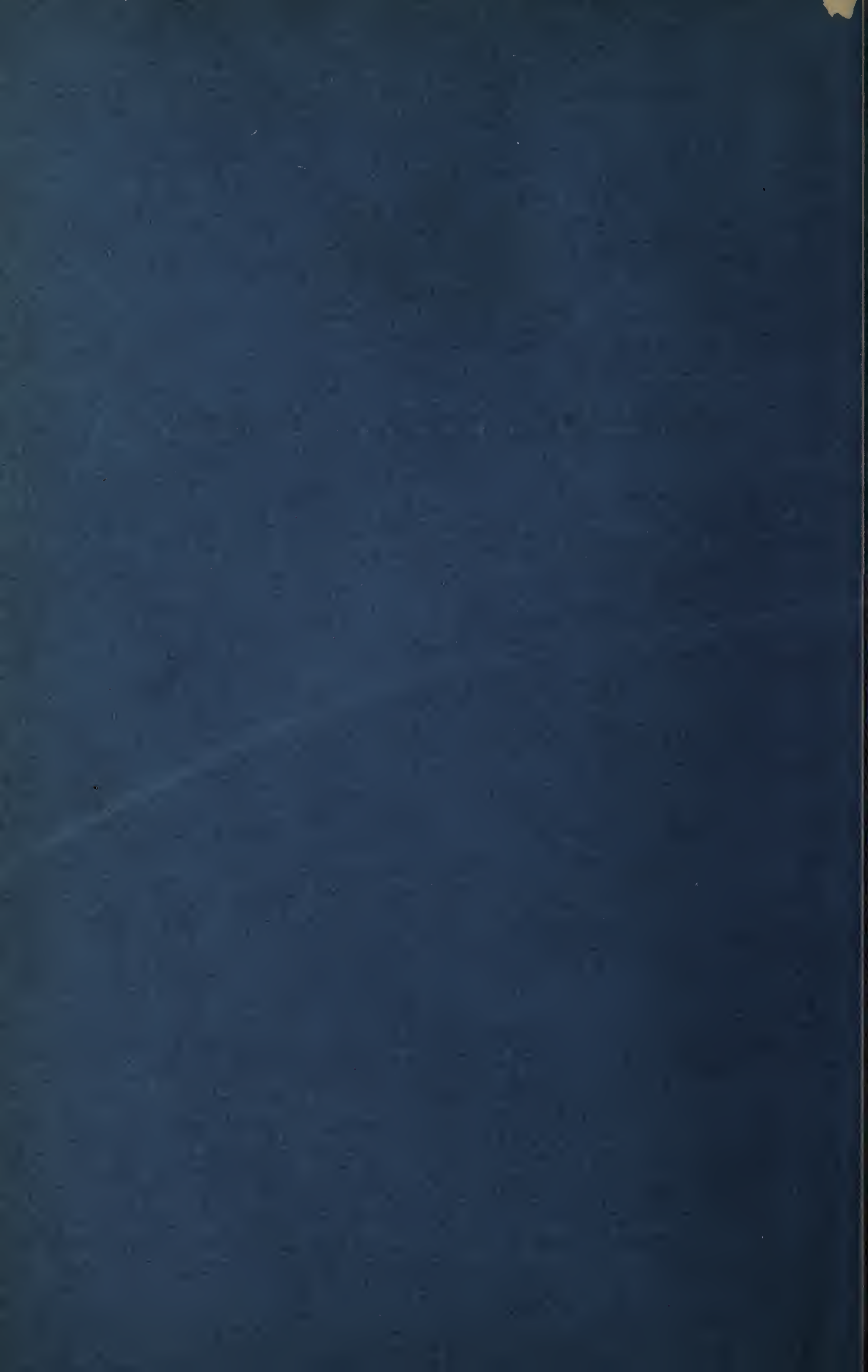
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1856.







A.D. 1810 . . . . . N° 3398.

Artificial Legs.

MANN'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, THOMAS MANN, of Bradford, in the County of York, Stuff Merchant, send greeting.

WHEREAS His most Excellent Majesty King George the Third did, by His Letters Patent under the Great Seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster, the Thirty-first day of October, in the fifty-first year of His reign, give and grant unto me, the said Thomas Mann, my exors, admors, and assigns, His especial licence, full power, sole privilege and authority, that I, the said Thomas Mann, my exors, admors, and assigns, during the term of yeãrs herein mentioned, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, my Invention of "CERTAIN IMPROVEMENTS IN THE CONSTRUCTION OF ARTIFICIAL LEGS;" in which said Letters Patent there is contained a proviso, that if I, the said Thomas Mann, shall not particularly describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, by an instrument in writing under my hand and seal, and cause the same to be enrolled in His Majesty's High Court of Chancery within two calender months next and immediately after the date of the said Letters Patent, that then the said Letters Patent, and all liberties and advantages whatsoever thereby granted, shall utterly cease, determine, and become void, as in and by the said recited Letters Patent, relation being thereunto had, may more fully and at large appear.



*Mann's Improvements in the Manufacture of Artificial Legs.*

NOW KNOW YE, that in compliance with the said proviso, I, the said Thomas Mann, do hereby declare that the nature of my said Invention of certain improvements in the construction of artificial legs for the purpose of assisting the human body after the loss of the natural leg by amputation or otherwise, which improvements are upon and in addition to a similar Invention invented by me, and for which I obtained His Majesty's Royal Letters Patent bearing date at Westminster, on or about the Twentieth day of January, in the thirtieth year of His reign, a particular description of which Invention I did cause to be enrolled in His said Majesty's High Court of Chancery within the time limited in such letters Patent, and in what manner the same are to be performed and carried into effect, are particularly described and ascertained in and by the Drawings hereunto annexed, and the following description thereof, that is to say:—

Figure 1 represents the complete limb, leg and thigh, when covered with doe leather, or other fit material, to which are annexed at letters A, A, A, straps which pass over the shoulders and fix the limb to the body.

Figure 2 represents the external appearance of the same when divested of the covering; letters B, B, B, three slender spiral springs connected with the patella C, designed to preserve the knee in perfect shape in all positions; D, centre pin of the knee joint; E, centre pin of the ancle joint; F, F, thick spiral springs, the one a repeller and the other an attracter, designed to preserve the ancle in shape in every attitude, and also to sustain the foot when taken from the ground, so as to prevent it from tripping when in the act of walking.

Figures 3, 4, 5, 6, represent the limb when disjointed.

Figures 7, 8, my two newly invented springs of great power, designed to improve the action of the several joints in the knee, ancle, and toes; the former (Fig. 7) being fixed by means of the pin G, G, which passes through the circular part of it, in the inner part of the thigh case, above the centre of the knee joint (Fig. 3), letter H, attaches to the lower or leg part (Fig. 4), in the manner represented, Fig. 9, by a thong or string of gut (letter K), which acts in a circular groove (letter M), and has the effect of assisting the wearer to recover the leg to a straight position after the flexure of the knee occasioned by the movement of the limb when in the act of walking, but by its near approach to the centre pin, as the leg bends to a right angle, loses its effect so far as to prevent the inconvenience of the leg being forced forward when required to remain in a sitting posture. The latter spring, Fig. 8, being fixed in a similar manner in the hollow part of the foot, Fig. 5, connects with the lower part of the leg below the centre of the ancle joint in the manner represented,



*Mann's Improvements in the Manufacture of Artificial Legs.*

Fig. 9, by means of the two prongs N, P; the prong N, which is acted upon as the pressure of the body comes upon the heel, prevents the foot from dropping to the ground with too great rapidity; the other prong P counteracts and the operation of the springs at the heel and instep, Fig. 2, F, F, so as to prevent  
5 the foot from remaining too much elevated after it is taken from the ground. Letters Q, Q, are two long prongs, connected with the same spring, which extends to the toe part (Fig. 6), and act as levers to raise the point of the toe when the foot is off the ground so as to prevent tripping, which effect is counteracted when the pressure of the body returns upon the foot.

10 Figure 10 represents the leg and foot complete, as it is designed for a below-knee amputation, to be fastened to the body by the straps R, R, which passing through the loops of a leather bearer, Fig. 11, S, S, when laced upon the limb, are tied or buckled to a drawn upon the thigh and supported by braces over the shoulders.

15 In witness whereof, I, the said Thomas Mann, have hereunto set my hand and seal, this Eleventh day of December, in the year of our Lord One thousand eight hundred and ten.

THO<sup>s</sup> MANN. (L.S.)

AND BE IT REMEMBERED, that on the Eleventh day of December, in  
20 the year of our Lord 1810, the aforesaid John Mann came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stampd according to the tenor of the Statute made for that purpose.

25 Inrolled the Twentieth day of December, in the year of our Lord One thousand eight hundred and ten.

LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,  
Printers to the Queen's most Excellent Majesty. 1856.





FIG. 1.



FIG. 2.

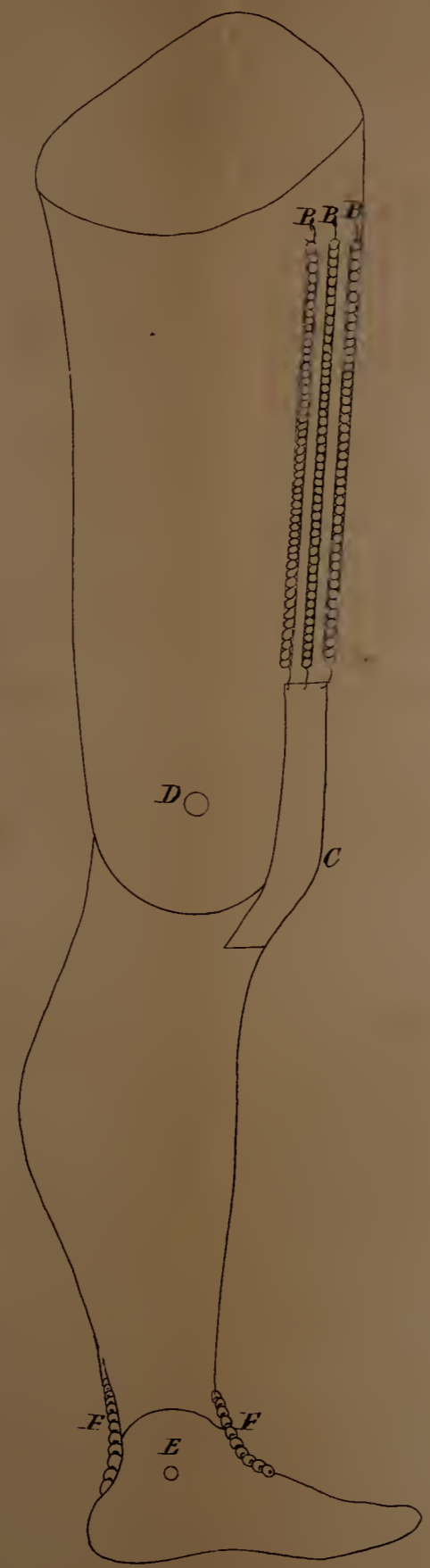


FIG. 3.



FIG. 4.

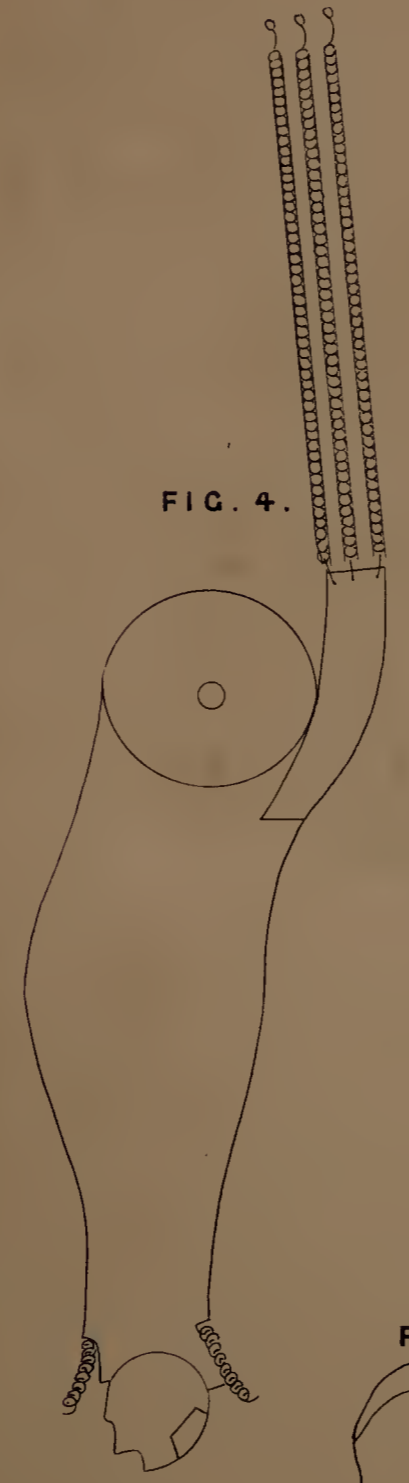


FIG. 5.



FIG. 6.



FIG. 7.

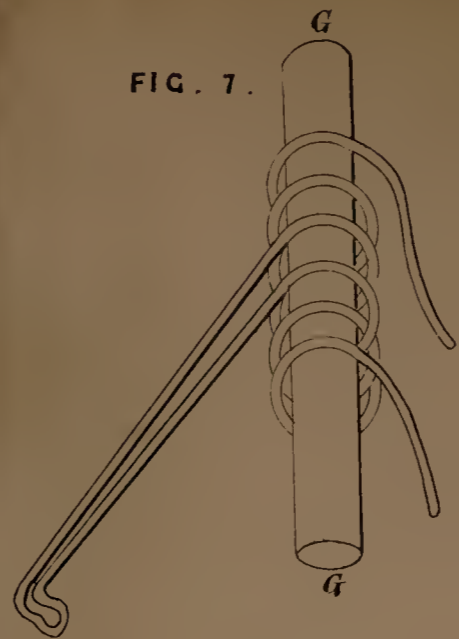


FIG. 9.



FIG. 10.



FIG. 8.

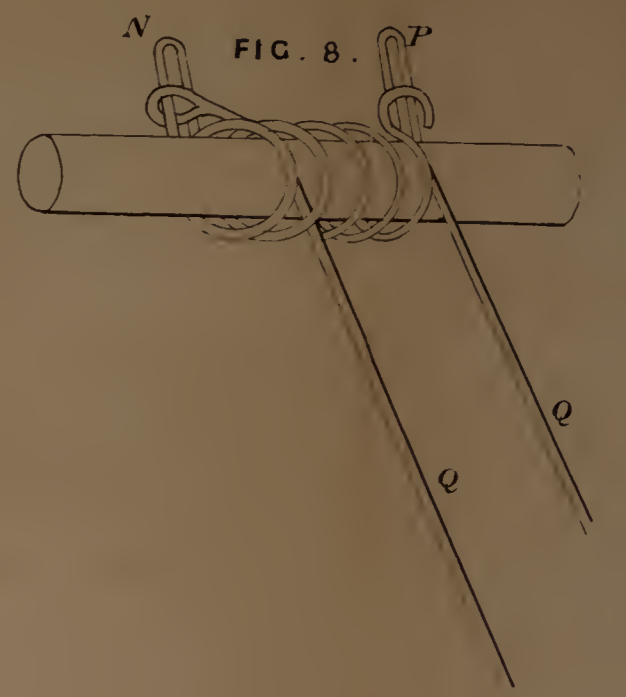
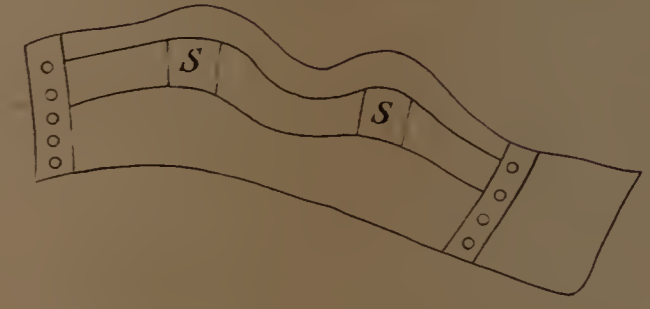


FIG. 11.



The smallest drawing is colored.

